



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3912

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

NOV 15 2011

Bob Marquette
President and CEO
Bostik, Inc.
11320 Watertown Plank Road
Wauwatosa, WI 53226

Re: Administrative Order and Testing Order

Dear Mr. Marquette:

The United States Environmental Protection Agency ("EPA") is issuing an Administrative Order and Testing Order to Bostik, Inc.'s facility located at 211 Boston Street in Middleton, Massachusetts.

As a generator of liquid hazardous wastes, which burns these hazardous wastes in a Struthers Wells gas fired boiler, the facility is subject to the National Emission Standards for Hazardous Air Pollutants for Hazardous Waste Combustion, found at 40 C.F.R. Part 63, Subpart EEE.

The Administrative Order finds that Bostik's 2008 comprehensive performance test, the 2009 retest, and subsequent testing efforts have not demonstrated compliance with Subpart EEE. The Testing Order requires Bostik to conduct a comprehensive performance test of its Struthers Wells boiler in accordance with Subpart EEE.

If you have any questions regarding this Administrative Order and Testing Order, please contact Environmental Engineer Joan Jouzaitis at (617) 918-1846 or

Jouzaitis.Joan@epa.gov, or have your attorney call Thomas T. Olivier, Senior Enforcement Counsel at (617) 918-1737.

Sincerely,

Dan Silverman, acting for

Susan Studlien, Director
Office of Environmental Stewardship
US EPA Region 1

Cc: Ed Pawlowski, MassDEP
Dan Welch, Bostik

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I – NEW ENGLAND**

IN THE MATTER OF

Bostik, Inc.
211 Boston Street
Middleton, MA 01948

Proceeding under Sections 113
and 114 of the Clean Air Act

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**ADMINISTRATIVE ORDER
AND
TESTING ORDER**

INTRODUCTION

1. The United States Environmental Protection Agency, Region I (“EPA”) issues this Administrative Order and Testing Order (“AO” and “TO”) to Bostik, Inc. (“Bostik”) under the Clean Air Act (“Act”). Bostik owns and operates a facility located at 211 Boston Street, Middleton, Massachusetts (the “Facility”).
2. The AO describes EPA’s findings that Bostik must conduct a comprehensive performance test under the National Emission Standards for Hazardous Air Pollutants for Hazardous Waste Combustion found at 40 C.F.R. Part 63, Subpart EEE (“Hazardous Waste NESHAP”).
3. The TO specifies the procedure for conducting a comprehensive performance test of the Struthers Wells boiler in accordance with the Hazardous Waste NESHAP.

STATUTORY AND REGULATORY AUTHORITY

4. The AO is issued under the authority of Section 113(a)(3) of the Act, 42 U.S.C. §7413(a)(3), which provides that whenever EPA finds that any person has violated or is in violation of any requirement of the Act other than SIP provisions or permits, EPA may issue an order requiring compliance with the requirement.

5. The TO is issued under the authority of Section 114(a)(1) of the Act, 42 U.S.C. §7414(a)(1). Under Section 114, EPA may require any person who is subject to any requirement of the Act to: establish records; make reports; sample emissions at the location and in the manner prescribed by EPA; and provide other information that EPA requires.

BACKGROUND AND FACTUAL BASIS

6. Bostik is a manufacturer of industrial grade adhesives and sealants.

7. At the Facility, Bostik combusts liquid hazardous wastes with an “as fired” BTU content of less than 10,000 BTU/lb in a gas fired Struthers Wells boiler, making it subject to the Hazardous Waste NESHAP. This liquid hazardous waste stream historically was generated in both the “Polyester Distillate” and the “Direct Solvation” departments.

8. Bostik began operation of its Struthers Wells boiler in 1988. Hazardous waste combustion in this boiler became subject to the Boiler and Industrial Furnace (“BIF”) provisions of the Resource Conservation and Recovery Act (“RCRA”) in 1991. The combustion of liquid hazardous waste fuel in the boiler became subject to the provisions of the Hazardous Waste NESHAP on September 30, 1999. The combustion of liquid hazardous wastes in the Struthers Wells boiler results in air emissions of both volatile organic compounds (“VOC”) and hazardous air pollutants (“HAP”).

9. In June 2008 Bostik conducted a comprehensive performance test (“CPT”) of its Struthers Wells boiler under 40 C.F.R. 63.1207(b)(1), including a dioxin/furan test as required by 40 C.F.R. 63.1207(b)(3).

10. The 2008 CPT failed to demonstrate the required destruction/removal efficiency for the principal organic hazardous constituent of concern, toluene.

11. Volatile organic data from the 2008 CPT did not pass quality assurance requirements, due to high loading on the volatile organic sampling train ("VOST").
12. The 2008 CPT results did not detect chlorine in the waste feed.
13. Bostik conducted a CPT retest on its Struthers Wells boiler in March 2009. This testing included a subset of parameters which were monitored during the 2008 CPT.
14. The 2009 CPT retest indicated benzene emission levels significantly above the highest standard used in analysis.
15. The 2009 CPT retest detected chlorine at 130 mg/kg in waste feed to the boiler in run 1, but not in runs 3 and 4. Bostik was required to analyze the results from 3 out of 4 sampling runs conducted during the CPT.
16. On May 18, 2009, Bostik submitted a Notification of Compliance to EPA (pages 2 through 7 of the 2009 CPT retest report). In Table 2-3 of the 2009 CPT retest report, Bostik set operating parameter limits for the Struthers Wells boiler.
17. Bostik reran the VOST test on the Struthers Wells boiler in June 2010, using VOST test Method 31.
18. Analytical results from the 2010 VOST test indicated that the precise quantification of benzene emissions was not possible, due to VOST tube saturation during the testing event.
19. Analytical results from the 2010 VOST test indicated that the average chlorine content of the waste feed was 0.351%.
20. Bostik began a waste feed sampling program on December 21, 2010, designed to investigate potential sources of benzene as well as chlorine in the waste feed to the Struthers Wells boiler.

21. Results from this waste feed sampling program indicated detectable levels of organic chlorine in the polyester burner feed, as well as in the T-1 tank bottom and basket strainer sludge.
22. An explosion and fire at the Facility on March 13, 2011 destroyed the Direct Solvation department. Manufacturing operations at the Facility were discontinued.
23. EPA wrote Bostik on June 8, 2011, offering an opportunity to confer concerning EPA's belief that changes in operation at the Facility have occurred that might adversely affect compliance with emissions standards not monitored with a CEMS, and require a new CPT under 40 CFR §63.1206(b)(5).
24. EPA and Bostik conferred on June 20, 2011 and August 9, 2011. Bostik submitted a written response on October 4, 2011.
25. On September 29, 2011, MA DEP issued a conditional approval (Application Number MBR-11-IND-013, Transmittal Number X238052) to Bostik for operation of its regenerative thermal oxidizer. This conditional approval provides for use of the Struthers Wells boiler as a back-up device for destroying process vapors typically routed to the regenerative thermal oxidizer (RTO).

FINDINGS

26. Bostik's 2008 CPT, 2009 CPT retest, and subsequent testing efforts have not demonstrated compliance with 40 CFR § 63.1207(b).
27. All the emissions testing to date was conducted on waste feed from the Direct Solvation department as well as the Polyester Distillate department. However, the Direct Solvation department was shut down as of March 13, 2011, and in the near future Bostik will only be producing and burning wastes from the polyester distillate process. Bostik has indicated that

wastes from the two departments are similar in nature. However, there has been no discreet sampling of wastes from each individual process line to demonstrate that the wastes are similar. Bostik stated in its 10/4/11 letter to EPA that all of the products that were made in the Direct Solvation department will be made in the Polyester Distillate department.

28. No detectable chlorine ("Cl") was found in the waste feed to the boiler in the 2008 CPT. In the first run of the 2009 CPT, Cl was detected in the waste feed at 130 mg/kg, yet Cl was not detected in the waste feed for the two additional runs analyzed. Organic Cl has been detected in waste feed analyses conducted in 2010 and 2011.

29. Bostik has not been able to quantify consistently the emissions of organic aromatic compounds from the boiler. The waste feed sampling program conducted in 2011 indicated the presence of several benzene-containing compounds in the waste feed, including xylenes, ethyl benzene, toluene, and dimethyl terephthalate. Incomplete combustion of any of these compounds could result in benzene emissions from the boiler.

30. Although the 2008 CPT did not indicate the presence of these HAPs in emissions, benzene was detected in 2009 performance test results, with some emissions outside of the calibration range of the instrument and therefore not able to be quantified. The June 2010 testing results also indicated the presence of benzene in emissions which could not be quantified due to sorbent tube saturation.

31. Based on the above findings, EPA has determined that changes in design, operation or maintenance practices have occurred that may adversely affect compliance with emissions standards not monitored with a CEMS. Therefore Bostik is subject to 40 CFR § 63.1206(b)(5) of the Hazardous Waste Combustion National Emission Standard for Hazardous Air Pollutants ("Hazardous Waste Combustion NESHAP"). According to 40 CFR § 63.1206(b)(5), if you plan

to change the design, operation or maintenance practices of the source in a manner that may adversely affect compliance with any emission standard that is not monitored with a CEMS, certain requirements must be met, including submitting prior notification and conducting a comprehensive performance test to document compliance with the affected emission standard(s) and establish operating parameter limits (“OPLs”).

ADMINISTRATIVE ORDER and TESTING ORDER

32. Pursuant to Sections 113(a)(3) and 114 of the Act, EPA hereby orders Bostik to comply with the requirements of 40 CFR §§ 63.1206(b)(5)(i)(B) and (C) concerning performance testing and restrictions on waste burning.

33. Bostik shall:

- a. Conduct a CPT of its Struthers Wells boiler in accordance with 40 CFR 63.1207(b) in order to:
 - i. demonstrate compliance with emissions standards of the Hazardous Waste NESHAP;
 - ii. establish limits for operating parameters provided by 40 CFR 63.1209; and
 - iii. demonstrate compliance with performance specifications for continuous monitoring systems.
- b. Conduct dioxin furan testing in accordance with 40 CFR 63.1207(b)(3). A one-time emission test for dioxin/furan must be conducted under “feed and operating conditions that are most likely to reflect daily maximum operating variability.”

34. Within 30 days of receipt of this TO, Bostik shall contact EPA’s Mike Looney, at (617) 918-8665 to schedule a conference. At this conference, EPA will review with Bostik the various

sampling, monitoring, testing, and analysis locations, procedures, and methods to be followed for the performance tests. This discussion shall include the choice of an appropriate POHC of concern for future testing.

35. Within 60 days of receipt of this TO, Bostik shall prepare and mail to EPA for approval an emissions testing protocol in order to determine the appropriate OPLs for the boiler as well as emissions from the facility's hazardous waste boiler. Bostik shall conduct 4 test runs and analyze the results from at least 3 of these test runs.

- a. The protocol shall include as an operating parameter the quantity of waste distillate stored in the feed tanks identified by Bostik as "T-1" and "T-2" over the period of testing, e.g., as a volume, fraction of the tank, percentage of a full tank, or as the depth of liquid from top surface to the bottom of the tank. The proposed range of waste distillate stored in the feed tank during testing must be representative of the extreme range of normal operating conditions.

36. Within 30 days of EPA's approval of the emissions testing protocol, Bostik shall conduct CPT testing of the Struthers Wells unit. Bostik is required to provide all of the information and take the steps outlined below. Specifically, Bostik shall:

- a. Use EPA approved test methods for emissions testing, as specified and approved in previously submitted Bostik test protocols for 2008, 2009 and 2010 emissions testing of the Struthers Wells boiler;
- b. Conduct testing under a worst case scenario, using hazardous waste distillate from all manufacturing processes for which Bostik intends to burn materials in this boiler;

- c. Ensure that waste feed tank levels are within the range specified in the test protocol;
 - d. Ensure that waste distillate, but not waste sludge, is burned in the Struthers Wells unit, unless specified in the test protocol and accounted for in the proposed OPLs;
 - e. Ensure that the waste distillate fed to the boiler is well mixed via use of the in-line homogenizer previously utilized by Bostik for CPT testing;
 - f. Take all proper measures to ensure that the testing is conducted in a safe manner;
 - g. Ensure that all OSHA and other safety-related requirements for workplace safety are met; and
 - h. Provide waste feed analyses of all constituents specified in the approved protocols for the CPTs conducted in 2008, 2009 and 2010, as well as the constituents and test methods specified in the waste feed sampling program approved by EPA in December 2010.
37. Within 30 days of completing the test, Bostik shall submit a complete test report to EPA.

Attachment A to this TO provides lists of required elements for pre-test protocols and test reports.

Mail the submissions required by this letter to:

Susan Studlien, Director
Office of Environmental Stewardship
U.S. Environmental Protection Agency, Region 1
5 Post Office Square, Suite 100, OES04-2
Boston, MA 02109-3912
Attn: Joan Jouzaitis, Air Technical Unit (Mail Code OES04-2)

38. Please be advised that failure to provide information required by this TO may result in a civil or administrative enforcement action by EPA under Section 113 of the Act, 42 U.S.C. §7413, ordering the submission of the required information, seeking monetary penalties, or both. Bostik should also be aware that federal law provides for criminal penalties for anyone who knowingly makes any false statement, representation, or certification in a report required by EPA.

39. Bostik may, if desired, assert a business confidentiality claim covering part or all of the information in the manner set forth in 40 CFR § 2.203(b). EPA will disclose information covered by such a claim only to the extent, and according to the procedures, set forth in 40 CFR Part 2, Subpart B. If no such claim accompanies the information when EPA receives it, EPA may make it available to the public without further notice to Bostik. Please be aware that the Commonwealth of Massachusetts may have different rules and regulations governing the protection of confidential business information. Bostik should read the regulations cited above carefully before asserting a business confidentiality claim, since certain categories of information are not properly subject to such a claim.

ENFORCEMENT

40. In accordance with the provisions of Section 113 of the Act, EPA may take any or all of the following actions: (a) issue a further order requiring compliance with the Act; (b) issue an administrative penalty order; or (c) bring a civil action in federal district court for an injunction and/or monetary penalties up to \$37,500 per day for each violation. See Sections 113(a), (b) and (d) of the Act, 42 U.S.C. §§7413(a), (b) and (d), and 40 CFR Part 19 as amended by 73 Fed. Reg. 75340-46 (Dec. 11, 2008) (Clean Air Act judicial and administrative penalties raised from \$25,000 to \$37,500 effective January 12, 2009). Be advised that Section 113(e)(2) of the Act, 42

U.S.C. §7413(e)(2), contains provisions that affect the burden of proof with respect to violations which continue or recur on or after the date of issuance of this AO.


41. If Bostik has knowingly violated the requirements of the Act, Bostik and its responsible corporate officers may be subject to criminal penalties under Title 18 of the United States Code, imprisonment for not more than five years, or both. See Section 113(c) of the Act, 42 U.S.C. §7413(c). Be advised that issuance of this AO, RR and TO does not preclude EPA from electing to pursue any other remedies or sanctions authorized by law which are available to address these violations.

OPPORTUNITY TO CONFER

42. Bostik may confer with EPA concerning this AO and TO and the findings upon which it is based. To schedule a conference, please contact Senior Enforcement Counsel Thomas T. Olivier at (617) 918-1737, or Environmental Engineer Joan Jouzaitis at (617) 918-1846 within seven (7) days of the date of issuance of this AO and TO. Bostik may choose to be represented by counsel at the conference.

EFFECTIVE DATE AND APPLICABILITY

43. This AO and TO are effective immediately. The provisions of this AO and TO apply to Bostik, its officers, agents, servants, employees, successors, and assigns, and to all persons, firms, and corporations acting under, through, or for Bostik. The AO and TO are not subject to Office of Management and Budget review under the Paperwork Reduction Act, 44 U.S.C. Chapter 35.


Susan Studlien, Director
Office of Environmental Stewardship
U.S. EPA, Region I

11-15-11
Date of Issuance